论文

A ROBUST DECOMPOSITION OF LINEAR PROGRAMMING USING A GOAL-PARTITIONING METHOD

Tao Huimin(1), Zhu Jishan(2)

(1)Department of Mathematics, Tianjin Institute of Technology, Tianjin 300191, China; (2)Department of Management Sciences, The University of Iowa, Iowa city, U.S.A.

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摘要 The Dantzig/Wolfe linear programming decomposition algorithm has had important economic interpretations as well as a widespread impact on solving large scale linear programming problem. In this paper we consider a similar underlying structure, where however there is only one coupling inequality or equation. With this simplification, we demonstrate how to achieve an equitable partition of the overall coupling resource to individual subproblem constraints through a simple iteration procedure which appears to be very efficient.

关键词 <u>Linear programming, decomposition princip</u>

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Tao Huimin(1),Zhu Jishan(2)

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Abstract The Dantzig/Wolfe linear programming decomposition algorithm has had important economic interpretations as well as a widespread impact on solving large scale linear programming problem. In this paper we consider a similar underlying structure, where however there is only one coupling inequality or equation. With this simplification, we demonstrate how to achieve an equitable partition of the overall coupling resource to individual subproblem constraints through a simple iteration procedure which appears to be very efficient.

Key words Linear programming decomposition principal optimal resource partition economic interpretation robust

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